

Editorials

Musings on the Election

AS THIS IS WRITTEN the national election is just over and there will be a new administration, a new Congress, and many new state and local officials. This was a year for returning the incumbents to office. The Republicans remain in the White House, the Democrats remain in control of the Congress, and to a great extent the incumbents prevailed in the state governments. There may have been more change in local governments where purely local issues were more readily addressed by voters. Somehow the election, no doubt the envy of many less privileged societies in the world, leaves one with an uncomfortable feeling that this process somehow failed to meet our needs as a nation in today's world. At the national level, for example, some of the most important issues pertaining to our future as a competitive nation were hardly even mentioned, let alone discussed in any meaningful fashion, during the campaign. The voters were really not able to give much direction to their elected or re-elected officials. One has an uncomfortable sense that as a nation we seem to be drifting purposelessly, rather than seriously addressing problems that must be faced and dealt with if we are to compete successfully in what is so obviously an increasingly competitive world. This has to be a serious matter for our future, since there is reason enough to believe that we have already begun to lose ground to some of our existing and potential technologic, social, economic, and political competitors in the rest of the world.

Our system, as it has evolved, seems to consider the future about as far ahead as the next election in the public sector of government, or the next bottom line or stockholders' meeting in the private sector of business or industry. This is ingrained and not likely to change without some considerable external stimulus. If we are to give more attention to what might need to be done today to better prepare ourselves for the ever more intensely competitive future ahead, the initiative must come from somewhere. Hardly anything can be more important to the future of this nation and its citizens.

It is suggested that something is needed to focus attention and provide a sense of genuine national purpose. There is already a growing concern that we may have been giving little more than lip service to such things as basic health care for those who need it and do not have it, and education for all our citizens. Without doubt a healthy and educated citizenry is essential for any nation to compete well in the social, economic, and political world environment that lies ahead. Physicians naturally think in terms of health because health is what we are all about. Perhaps it is time for the nation to prepare for its future by making a national determination that ours must become a healthy nation in the fullest sense of the term. Health, as we have come to understand it, has many dimensions. It involves personal, public, and environmental health. These in turn require that there be social, economic, and political health, and it follows that a literate and educated citizenry is essential for each of the above. Ill health in any of these dimensions brings illness to patients, societies, and nations, and it is not to be forgotten that weakness accompanies ill health wherever it occurs.

Physicians are among the more educated of our citizens and also are among those more dedicated to health, whether

this be personal, public, environmental, social, economic, or political, or dedication just to the degree of literacy and education that is necessary for health and health care. Should physicians, with perhaps a longer view than some of what is needed for a healthy future, sound a clarion call to persuade this nation to prepare more realistically for the future? If there is need for a national purpose, could this purpose be a determination to become a healthy nation in the broad sense that has been described? Such a national purpose would surely be one worthy of our destiny as a nation, and, if achieved, could only serve us well. But alas, like elsewhere in our democratic society, even in the medical profession and in medical associations, the future is more often addressed only in the short range, that is, from year to year, from one society election to the next. If this is to become a strong, healthy nation in the sense described herein, where lies the responsibility to bring this about, and how is this responsibility to be exercised?

MSMW

Meningococcal Infections—What's Next?

SERIOUS MENINGOCOCCAL INFECTIONS, primarily meningitis and sepsis, continue to be a major health problem in many parts of the world. Victor Wong, MD, elsewhere in this issue concludes that "*Neisseria meningitidis* remains a significant cause of morbidity and mortality in Los Angeles County." In Los Angeles County, the attack rate is 1 to 5 cases per 100,000 population per year. Yet, in Zaria, Nigeria, the rate of meningococcal meningitis is 63 cases per 100,000 population per year. In both locales meningococcal disease occurs primarily in children. Diseases caused by *N meningitidis* are a worldwide health problem.

Current and future work on preventing invasive meningococcal disease includes making the currently available quadrivalent vaccine (derived from capsular polysaccharides) highly immunogenic in very young children. Because newborn infants can produce antibodies to proteins (such as tetanus toxoid) but fail to produce antibodies to polysaccharide antigens, the approach is to covalently link the capsular carbohydrate (or a haptenic portion thereof) to a protein. The resultant antibody response to this conjugant vaccine is to both the protein and the carbohydrate. Pilot studies have shown that conjugant vaccines evoke high titers of anticapsular antibody. The presence of higher titers of anticapsular antibody correlates with protection from bacteremic infections—sepsis, meningitis, and arthritis, for example. Anticapsular antibodies have no effect on nasopharyngeal carriage, however. Thus, the spread of meningococci through a community would not be affected by such a vaccine.

A logical extension of the conjugant vaccine concept is to covalently link the capsular carbohydrate to a meningococcal surface protein whose antigenicity is conserved among all strains. Such a vaccine may not only be consistently immunogenic in all ages but would be directed against two bacterial structures—a one-two punch. If the meningococcal surface protein were necessary for colonization, person-to-person spread could also be prevented. Another approach to developing an antimeningococcal vaccine is to develop a surrogate image of the antigenic portion of the capsular poly-